

**REMARKS**Response To Objections/RejectionsResponse To Objections To Specification

The Office Action objects to the specification as containing new matter because the specification allegedly does not provide support for colloidal particle sizes as large as 500 nm. To expedite prosecution of the present application and without commenting on the propriety or impropriety of the objection, Applicant amends the specification to replace 500 nm with "300 nm, or more." Support for this amendment is found, for example, on page 7, line 25, of the specification as originally filed which states in the context of Example 1:

"The purpose of this invention is to increase the particle sizes of the silica through the accretion of active silica onto a seed of smaller particles, or nuclei. In this fashion, the particles can be 'grown' to 300 nanometers, or more, if desired."

(Emphasis added)

Applicant submits the objection is overcome by this amendment. The Office Action states that "[t]he issue is what the skilled artisan would have understood this applicant to have been in possession of based on his application as originally filed." There can be no doubt that a skilled artisan reading the application as filed, as a whole, including the Detailed Description of the Preferred Embodiment, Example 1 therein, and the claims as originally filed, would understand that the applicant was in possession of a process for producing high purity colloidal silica involving silica particles that can be grown to more than 80 nm and as much as 300 nm, or more, as noted above. That the silica particles of applicant's invention can be larger than 80 nm is further supported by, for example, page 5, lines 15-17, of the Specification, which states: "The silica sols generally have an average particle size of 8-200 nm, and preferably of from 10-80 nm ..." A skilled artisan would understand that the applicant is not describing his invention to be limited to use of silica particles in the range of only 8-80 nm, as a skilled artisan would understand that such an interpretation would be inconsistent with applicant's description of the process of his invention as resulting in silica particles having a size generally in the range of 8-200 nm and which can be "grown" to 300 nm or more.

Moreover, a skilled artisan reading the application would understand that the emphasis of applicant's invention is directed to his method for producing high purity colloidal silica (i.e., a colloidal silica having a low sodium content) and not to the particular particle size or particle size range of the silica. See, for example, page 1, lines 4-6; page 2, lines 13-21 and 27-34; page 4, line 2 – page 5, line 18; Examples 1-3; and the original claims. One skilled in the art would further understand that applicant intends no particular particle size range when he uses the term "colloidal silica." Cf., original claim 1 to original claim 5. One skilled in the art would understand from reading the application as filed that the term colloidal simply means that the particles do not settle out of solution. This is supported, for example, by page 1, lines 9-10, of the Specification as filed which states: "The material is colloidal in that the silica particles do not settle out of solution." This is consistent with, and supported by, the prior reference to Hawley's Condensed Chemical Dictionary, 13 ed., 1997, pp. 288-89, previously provided. The Federal Circuit has instructed trial courts to look first to the claim language itself to define the scope of the patented invention, and, as a starting point, to give claim terms their ordinary and accustomed meaning as understood by one of ordinary skill in the art. See *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1202-3 (Fed. Cir. 2002). In *Texas Digital*, the Federal Circuit explained that "[d]ictionaries, encyclopedias and treatises ... are objective resources that serve as reliable sources of information on the established meanings that would have been attributed to the terms of the claim by those of skill in the art. *Id.* at 1202-3.

#### Response To Claim Rejections Under 35 U.S.C. §112, First Paragraph

Claims 1-9, and 18-20, and 23-24 are rejected under 35 U.S.C., first paragraph, because the specification allegedly does not support the claimed subject matter in a way that would indicate to a skilled artisan that the Applicant had possession of the claimed subject matter at the time the application was filed. The Office Action cites to the prior amendment of the specification amending the upper size range of colloidal silica particle size from 80 to 500 nm. Applicant respectfully traverses this rejection for the same reasons provided above.

**CONCLUSION**

In light of the foregoing amendments and for at least the reasons set forth above, Applicant respectfully submits that all objections and rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims 1-9, 18-20, and 23-24 are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby respectfully requested. If, in the opinion of the Examiner, a telephone conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,



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